



NAVAL Postgraduate School

Price Analysis on Commercial Item Purchases Within the Department of the Navy

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maintaining the data needed, and c including suggestions for reducing	ompleting and reviewing the collect this burden, to Washington Headqu uld be aware that notwithstanding ar	o average 1 hour per response, includion of information. Send comments a arters Services, Directorate for Informy other provision of law, no person a	regarding this burden estimate of mation Operations and Reports	or any other aspect of th , 1215 Jefferson Davis I	is collection of information, Highway, Suite 1204, Arlington		
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### "Taxpayers

want confidence that the prices the government pays are fair and reasonable.

The rules governing that determination aren't simple."

"One of the most controversial areas in government contracting surrounds cost and pricing:

the means by which a contracting officer makes a "fair and reasonable" price determination"



Quoted by Mr. Michael Fischetti, Executive Director, National Contract Management Association, Aug. '14 Federal Times article in regards to the complications of cost and pricing





- Problem statement
- Data overview
  - Contracting file checklist and
  - Contracting personnel survey
- The observations and conclusions
- Recommendations
- Concluding remarks



## **Problem Statement for the Research**

- 1. Before the procurement reforms in the late 1990s, most contract pricing of acquisitions was conducted using "cost analysis" by Contract Specialists
- 2. Then came FAR Part 12 and identifying items as "commercial" (FAR 2.101)
- 3. As a result, the federal acquisition workforce has had to adapt to the need for new skill sets
  - contracting specialists needed to have a greater knowledge of market conditions, industry trends, and market prices
  - So, instead of analyzing cost proposals, Contract Specialists are now using market forces to determine reasonable prices
- 4. Thus, the increase of both market research and extensive use of price analysis methods
- 5. However, 2001 2014 reviews by DOD-IG concluded that new pricing skill sets have not always been present in the purchase of commercial items
- 6. Several initiatives have been introduced to improve pricing skill sets such as regulations, handbooks, DAU courses

#### The overall goals of the project:

Can the researchers conclude that DoD is doing a better job in pricing commercial items?

Can DoD do a better job in pricing our commercial purchases?





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Description of Data and Methodology



# **Description of Data and Methodology**

### data from contract files

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### data from survey answers.

Answer questions 17-18 only if Comparison of Proposed Prices received in	response to the solicita	ition were u
determining price reasonableness and documented in the pricing memora	andum on file.	
*Note: Using Proposed Prices (FAR 15.403-18(1)). Any proposed price use	d as a base for prices an	alysis must
the general requirements.		
•The price must be submitted by a firm competing independently for con-	tract award.	
<ul> <li>The price must be part of an offer that meets Government requirements</li> </ul>	. (Technically Acceptable	e)
<ul> <li>Award must be made to the offeror whose proposal represents the best</li> </ul>	value to the Governmen	15.
*For SEALED BIDDING ONLY -Were offers responsive to the Govt. require	ment?	
	100000-0	
17) Was a price from an offeror whose proposal was technically unaccep		
for price comparison basis?	□ Yes	□ No
18) Was a price from an offeror whose proposal was determined to be n	on-responsible	
used for price comparison basis in the pricing memorandum?	□ Yes	□ No
*Please proceed to question #30 when finished with questions #17-18.		
Comparison of Historical Prices		
Answer questions 19-21 only if comparison of the proposed prices to histo	orical prices paid, wheth	er by the
Government or other than the Government, for the same or similar items	were used in determini	ng price



### **Contract File Review Data Collection**

### Looked at three years of contract files

- Randomly sampled 50 contract files (\$72.2M total)
  - 19 contracts for the purchase of supplies (\$23M), and
  - 31 contracts for services (\$49.2M)
  - 41 commercial item contracts, and
  - 9 non-commercial;
- The checklists were created based on standards outlined in the Federal Acquisition Regulation (FAR)/Defense Federal Acquisition Regulation



# Contracting Personnel Survey Design and Subjects

## Survey Design

- It had 22 questions in four parts:
  - (1) demographic information,
  - (2) acquisition information,
  - (3) pricing information, and
  - (4) supervisory information.

## Survey Responses

- 24 survey respondents out of 50 completed the entire survey (a
   25<sup>th</sup> survey was received with demographic information only)
- 2 of the 24 were supervisors
- Responders' experience in acquisition and contracting:
  - 18 people had more than 5 years of experience
  - 6 people had 3-5 years of experience,
  - 1 person (4%) had less than 3 years of experience





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Data observations, Conclusions and Recommendations



# **Contract File Research Questions**

- Do pricing memos deviate from FARs, DFARSs requirements and DFARSs (PGI) procedures?
- Do pricing memos document the type of price analysis

Our research focused on observations from six questions. Due to time constraints, I will focus on the data mined and the findings from three.

techniques exercised in purchasing supplies vs. services?

• Why do pricing memos lack sufficient justifications and supporting information?

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10



 Do pricing memorandums deviate from Federal Acquisition Regulation (FAR), Defense Federal Acquisition **Regulation Supplement (DFARS)** requirements and DFARS Procedures, Guidance and Information (PGI) procedures?



# To What Extent Do Pricing Memos Deviate From FAR/DFARS Requirements?

FAR Price Analysis Techniques	Total	Supplies	Services		
Inadequate price competition	10 of 23 (43%)	3	7		
Acceptance of prior prices without establishing their reasonableness	7 of 12 (50%)	3	4		
Incomplete statements based on references to market research	0 of 12 (0%)	0	0		
Incomplete references to current price list, catalog, or advertisement	1 of 6 (17%)	1	0		
Incomplete comparison with IGCE or use of unreliable IGCEs	16 of 21 (76%)	1	15		
Offeror did not provide data that was appropriate	0 of 1 (0%)	0	0		
No price documentation in file	2 of 50 (4%)	2	0		
Totals of inadequate price analysis documentation for price reasonableness justification	36 ina	A considerable number of inadequate price analysis found in our sampled memos			



# To What Extent Do Pricing Memos Deviate From FAR/DFARS Requirements?

• It appears that contracting personnel are not familiar with how to appropriately <u>perform and document price analysis.</u>

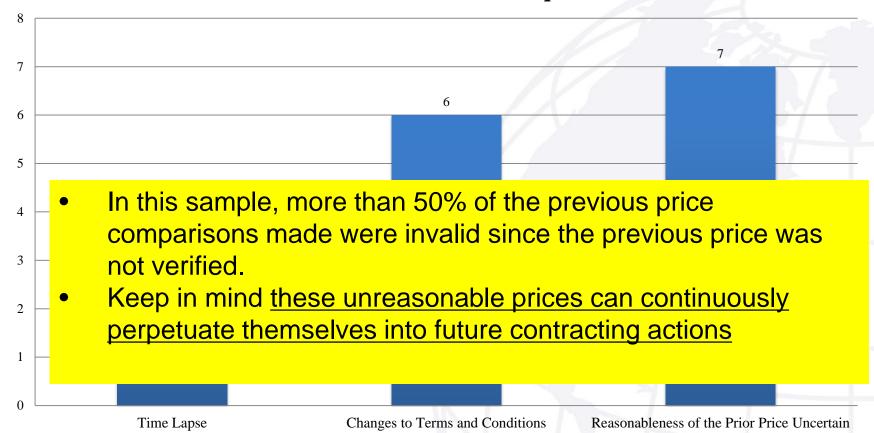
• In particular, two types of price analysis, prior prices and IGCEs were performed and documented incorrectly more than 50% of the time



# Prior Price Disqualifiers

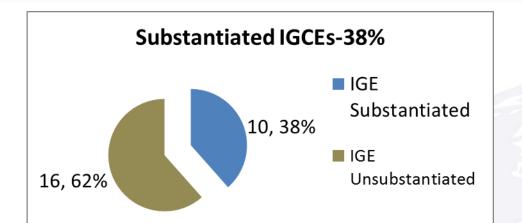
Invalid previous (historical) prices were found because of one or more of the reasons below:

### **Contract File Data - Prior Price Disqualifiers Found**





# **Poorly Supported IGCEs**



- In this sample, 38% of the IGCEs were substantiated
- Essentially the developer of these IGCEs explained the sources of information and the basis used to make the estimate
- 62% had little if any support behind their IGCE and were used to support an offered price



## **Research Question 4**

• If deviations in pricing memorandums exist, do they differ by the same characteristics and/or by unsimilar characteristics?



# Contract File Data – Adequate vs. Inadequate Justification for Price Reasonableness

		Adequate Justification	Inadequate Justification	Documentation not in file	Total	Percent Justified
	Contract Files	27	21	2	50	54%
	Services	15	16	0	31	48%
P. L. San	Supplies	12	5	2	19	63%

A majority of the pricing memorandums do deviate by three consistent characteristics:

- Lack of supporting documentation to justify the technique utilized to establish price reasonableness
- 2. Use of unsupported IGCEs
- 3. Unverified previous prices

17





• What are the most predominant price analysis techniques exercised in purchasing supplies versus services?



# "What Was the Documented Justification for Price Reasonableness?"

	Observations:  • Services-Next to comp			
Price Justificati	prior prices and IGCEs used in supporting the	<u>Supplies</u>	Services	
Current offered pri	of proposed prices	10	13	
Previous prices pa	odon do odios data no	4	8	
Parametric estimating offeror			0	0
Competitive publis	6	5	1	
Independent gover	21	4	17	
Market research	12	5	7	
Analysis of sales d	1	1	19	



# Overall Observations and Conclusions\* of Sampled Contract Files

- What we observed:
  - Inadequate documentation to support pricing determination.
  - Little use of quantitative skills learned in pricing classes,
  - Unreliable IGCEs, and
  - Infrequent requests for offeror data when needed.
- What we concluded:
  - Contracting personnel are not doing a better job in pricing commercial items but --- can do a better job
  - Essentially they are not familiar with how to appropriately perform and document price analysis.
- \* Similar conclusions from previous year of research

# • The challenges in executing price analysis according to the nonsupervisory personnel:

- "time to complete" and
- "inadequate skill level"

### • DAU courses:

- The majority said they were effective.
- However, all the written comments by the surveyed participants supported that price analysis is underemphasized in the DAU courses

## NOTE: Comparing the file data and survey data:

 Personnel responded that they use quantitative methods often but the authors did not find any real use of quant methods in the contract file pricing documentation.



## POSTGRADUATE Recommendations: Reasonable Pricing of Services

### Pricing services is different from supplies, some suggestions:

- A step should be added to the services acquisition guidebook that focuses just on the pricing of services.
- FAR, DFARS, and PGI need to <u>reframe price analysis methods that are</u> <u>more useful in purchasing services</u>, as opposed to current references to supplies only
- Since IGCEs play such an important part in pricing services as both a "should price" before the request for vendor prices and as a "comparison price" to determine price reasonableness after a price is proposed, we recommend that government activities **increase the importance of IGCEs** and consider the following steps:
  - (1) Generate local guidance and train contracting personnel on what reliable IGCEs contain and what to document, and
  - (2) train the users on how to reliable develop IGCEs
  - (3) Create an online check system where government IGCEs are accepted if and only if the substantiation is provided, and
  - (4) acknowledge IGCEs in the FAR/DFAR/PGI with more emphasis than is currently is given



### **Recommendations: Supporting Documentation**

- Oversight procedures for documentation for price analysis (documented and reviewed for completeness and adequacy) such as:
  - Local audits
  - Reinforcement by local procurement leadership in the importance of file documentation, and
  - hands on type training to make sure personnel understand what is and what is not proper supporting documentation.
- Survey respondents made the following recommendations:
  - "It would be a good idea to review the FAR definitions of what constitutes an acceptable fair and reasonable determination. Even though training has been conducted on this topic, this is the sort of thing that should be reviewed periodically."
  - "A peer review could definitely be useful."
  - "(Perform) in-house quality assurance surveillance assessment (QASA) reviews (on the contract files) and provide training from the findings."



### **Recommendation: Prior Price Verifications**

• Contracting personnel MUST first validate previous prices before using them in a price reasonableness determination and then adjust those prices to make them comparable with the current offered price.,e.g.,

FY14 DODIG Review of CO Prices for **Sole Source Commercial Spare Parts** 

- Previous Price not verified
- DOD overpaid \$9 million



Army OH-58D Source: http://www.bellhelicopter.com

- If the previous price is not found to be valid, one MUST find another method to determine price reasonableness.
  - Such as asking to review Contractor sales data
- DAU must include more classroom focus on this subject.



## POSTGRADUATE Recommendations: Market Research

- Reliable market research from customers/requirement activities will improve the buyers'
  - understanding of the marketplace, and
  - decisions when it comes to prices offered
- Contracting and requiring activities **TOGETHER** should review agency guidance on market research and consider combined in house training.
  - This will give both parties responsible for market research an opportunity to express their issues with conducting market research, documenting market research, and applying the information in the market research report to make informed pricing determinations.
- Suggest that FAR Part 10 require that pricing be discussed in the market research reports and not just suggest
  - The FAR identifies market research as a method for the determining price reasonableness but does not require that pricing be documented in the report.

25



### **Recommendations: Performance of Price Analysis**

- DOD agencies need to take a hard look at what is disabling the personnel from performing price analysis properly such as:
  - Why personnel are not following price reasonableness standards IAW the FAR/DFARS,
  - How contracting personnel are trained in pricing commercial item purchases
- Eliminate or reduce the challenges that contracting personnel have in executing proper price reasonableness,
  - e.g Guidance is needed on "Conducting market research when the item is sole source/single source and no other vendors can provide price quote."
- Add adequate guidance on the preparation of IGCEs and market research reports by customers (requiring activities).



# Take away from current talk

- We did not find a magic pill to help Contracting personnel to pay cheaper prices and to document "Price Analysis" appropriately in contract files-just recommendations
- However, the DAR council is currently processing a proposed DFARS rule that implements the requirements of the FY13 NDAA titled "Evaluating Price Reasonableness for Commercial Items."
  - In front of the proposed rule, Shay Assad, Director of Defense Pricing issued a memo to the contracting community on 12 Feb of this year
  - His memo provides guidance for Contracting Officers as to how they should approach the pricing of items purported to be commercial

See DPAP Policy Letter on Determination of the Reasonableness of Price for Commercial Items



# **Ending Remarks**

 Many believe that "Price analysis of Commercial Items are mere dollars looked at versus millions in cost analysis of major systems" so why the push and additional effort??

# Our philosophy:

# "Take more care of the dollars, and the millions of dollars will take care of themselves"

 Thus, if we are not doing a good job at the dollar level how can we at the millions of dollars level???